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(54) Title: MODIFIED ANTIVIRAL PEPTIDES WITH INCREASED ACTIVITY AND CELL MEMBRANE AFFINITY

(57) Abstract: The activity and cell membrane affinity of certain antiviral multiple branch peptide constructions, including those known from WO 95/07929, WO 98/29443 and WO 03/95479, can be improved by bonding to the C-end of the peptide a terminator which is either (a) an  $\omega$ -amino-fatty acid having from 4 to 10 carbon atoms and from 0 to 2 carbon-carbon double bonds or (b) a peptidic cell membrane penetrating agent. The improvement is so marked that in some cases the number of branches can be reduced, sometimes to a single branch, and/or that the branches may be shortened. The preferred  $\omega$ -amino-fatty acids are  $\gamma$ -aminobutyric acid,  $\delta$ -aminovaleric acid and  $\epsilon$ -aminocaproic acid. The peptidic cell membrane penetrating agent is suitably a TAT-derived peptide, penetratin<sup>®</sup> or Kpam.

## INTERNATIONAL SEARCH REPORT

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**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 7 A61K39/21 C07K7/02

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 95/07929 A (MCKELVEY IAN EDWARD ; ARMEL SA (LU)) 23 March 1995 (1995-03-23) cited in the application page 2, paragraph 3 - page 6, paragraph 2 -----	1-3, 7-9, 11-14
Y	WO 98/29443 A (MABROUK KAMEL ; ROCHAT HERVE (FR); RIETSCHOTEN JURPHAAS VAN (FR); SABA) 9 July 1998 (1998-07-09) cited in the application page 2, paragraphs 3,4 -----	1, 4-8, 10-14
Y	WO 99/25381 A (UNIV SOUTH CAROLINA) 27 May 1999 (1999-05-27) page 18, line 19 - page 19, line 10 ----- -/-	1-13

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Patent family members are listed in annex.

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	US 5 876 731 A (CHONG PELE ET AL) 2 March 1999 (1999-03-02) column 6, line 23 - column 7, line 28 -----	1-3,7-9, 11-14

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

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